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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/529,861	03/31/2005	Tetsuji Shibata	HOK-0270	1482
23353 7590 06/28/2007 RADER FISHMAN & GRAUER PLLC LION BUILDING 1233 20TH STREET N.W., SUITE 501 WASHINGTON, DC 20036			EXAMINER CROWELL, ANNA M	
			ART UNIT 1763	PAPER NUMBER
			MAIL DATE 06/28/2007	DELIVERY MODE PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

## Office Action Summary

**Application No.**

10/529,861

**Applicant(s)**

SHIBATA ET AL.

**Examiner**

Michelle Crowell

**Art Unit**

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 31 March 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-28 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☐ Claim(s) \_\_\_\_\_ is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☒ Claim(s) 1-28 are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_.

## DETAILED ACTION

### *Election/Restrictions*

1. Restriction is required under 35 U.S.C. 121 and 372.

This application contains the following inventions or groups of inventions which are not so linked as to form a single general inventive concept under PCT Rule 13.1.

In accordance with 37 CFR 1.499, applicant is required, in reply to this action, to elect a single invention to which the claims must be restricted.

Group I, claim(s) 1-23 and 26-28, drawn to an apparatus.

Group II, claim(s) 24, drawn to a method for making a reaction vessel.

Group III, claim(s) 25, drawn to a method for using the plasma treatment apparatus.

2. The inventions listed as Groups I and II do not relate to a single general inventive concept under PCT Rule 13.1 because, under PCT Rule 13.2, they lack the same or corresponding special technical features for the following reasons:

Groups I and II do not relate to a single general inventive concept because the special technical feature of Group I is an apparatus, comprising: a reaction vessel is formed by an insulation member, a plurality of through holes, an inflow opening, an outflow opening, and electrodes for developing the discharge space. Group II regards a method **of performing integral molding of a resultant laminate**. Although Group II recites reaction vessel is formed by an insulation member, the special technical features of Group II is the method **of performing integral molding of a resultant laminate**. Since the special technical feature of Group I is not present in Group II, unity of invention is lacking.

Groups I and III do not relate to a single general inventive concept because the special

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technical feature of Group I is an apparatus for activating a plasma generation gas, comprising: **a reaction vessel is formed by an insulation member**, a plurality of though holes, an inflow opening, an outflow opening, and electrodes for developing the discharge space. Group III regards a method for activating a plasma generation gas. Although Group I recites forming activating a plasma generation gas, the special technical features of Group I is **a reaction vessel is formed by an insulation member**. Since the special technical feature of Group I is not present in Group III, unity of invention is lacking.

**Note. If the applicant elects apparatus claims, then a Species should be selected.**

3. This application contains claims directed to more than one species of the generic invention. These species are deemed to lack unity of invention because they are not so linked as to form a single general inventive concept under PCT Rule 13.1.

The species are as follows:

Species I- Figure 1b

Species II- Figure 2b

Species III- Figure 3b

Species IV- Figure 5b

Species V- Figure 7b

Species VI- Figure 8

Species VII- Figure 9

Species VIII- Figure 10

Species IX- Figure 14b

Species X- Figure 15a

Applicant is required, in reply to this action, to elect a single species to which the claims shall be restricted if no generic claim is finally held to be allowable. The reply must also identify the claims readable on the elected species, including any claims subsequently added. An argument that a claim is allowable or that all claims are generic is considered non-responsive unless accompanied by an election.

Upon the allowance of a generic claim, applicant will be entitled to consideration of claims to additional species which are written in dependent form or otherwise include all the limitations of an allowed generic claim as provided by 37 CFR 1.141. If claims are added after the election, applicant must indicate which are readable upon the elected species. MPEP § 809.02(a).

4. The claims are deemed to correspond to the species listed above in the following manner:

Species I-	Figure 1b-	1-4, 8-9, 13-17, 19, and 26-27
Species II-	Figure 2b-	1-3, 5, 7-9, 13-17, 19, and 26-27
Species III-	Figure 3b-	1-3, 6, 10, 13-17, 19, and 26-28
Species IV-	Figure 5b-	1-3, 11, 13-17, 19, and 26-27
Species V-	Figure 7b-	1-3, 12-17, 19, and 26
Species VI-	Figure 8-	1-3, 13-17, 19-20, 22 and 26-28
Species VII-	Figure 9-	1-3, 13-17, 19-21, and 26-28
Species VIII-	Figure 14b-	1-3, 13-19, and 26
Species IX-	Figure 15a-	1-3, 13-17, 19, 23, and 26

The following claim(s) are generic: 1-3, 13-17, 19, and 26.

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5. The species listed above do not relate to a single general inventive concept under PCT Rule 13.1 because, under PCT Rule 13.2, the species lack the same or corresponding special technical features for the following reasons:

6. Species I has the special technical feature of electrodes that are exposed to the interiors of the through holes which is not required by the other species. Species II has the special technical feature of electrodes are disposed such that the electric flux lines are generated the through holes in a direction parallel to a flow of the gas which is not required by the other species. Species III has the special technical feature of the through holes are formed in a slit shape which is not required by the other species. Species IV has the special technical feature of electrodes that are formed in layers in the insulating members, and have apertures at positions corresponding to the through holes, and wherein there is no deficit portion between adjacent apertures in the electrodes which is not required by the other species. Species V has the special technical feature of an outer peripheral portion of one of the electrodes projects outward relative to the outer peripheral portion of the other electrodes which is not required by the other species. Species VI has the special technical feature of a radiator for cooling the insulating member and a uniforming means which is not required by the other species. Species VII has the special technical feature of a temperature regulator which is not required by the other species. Species VIII has the special technical feature of the electrodes are neutral grounded which is not required by the other species. Species IX has the special technical feature of the reaction vessel is formed by combining a plurality of insulating members which is not required by the other species.

7. Applicant is advised that the reply to this requirement to be complete must include (i) an election of a species or invention to be examined even though the requirement be traversed (37 CFR 1.143) and (ii) identification of the claims encompassing the elected invention.

The election of an invention or species may be made with or without traverse. To reserve a right to petition, the election must be made with traverse. If the reply does not distinctly and specifically point out supposed errors in the restriction requirement, the election shall be treated as an election without traverse.

Should applicant traverse on the ground that the inventions or species are not patentably distinct, applicant should submit evidence or identify such evidence now of record showing the inventions or species to be obvious variants or clearly admit on the record that this is the case. In

either instance, if the examiner finds one of the inventions unpatentable over the prior art, the evidence or admission may be used in a rejection under 35 U.S.C.103(a) of the other invention.

8. Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michelle Crowell whose telephone number is (571) 272-1432. The examiner can normally be reached on M-F (9:30 -6:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Parviz Hassanzadeh can be reached on (571) 272-1435. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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